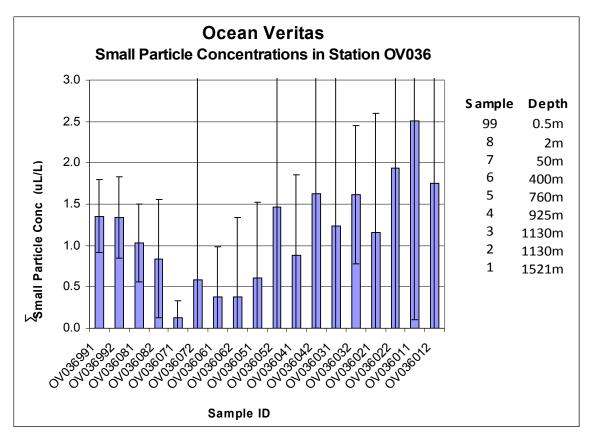
<u>Daily Report: Tracking the Plume of Dispersed Oil using Particle Size Distribution</u> <u>Measurements</u>

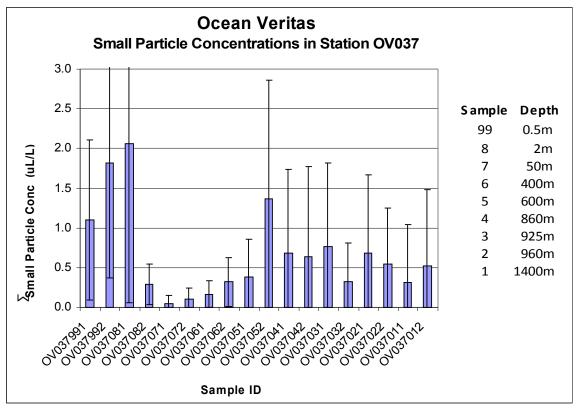
June 10, 2010

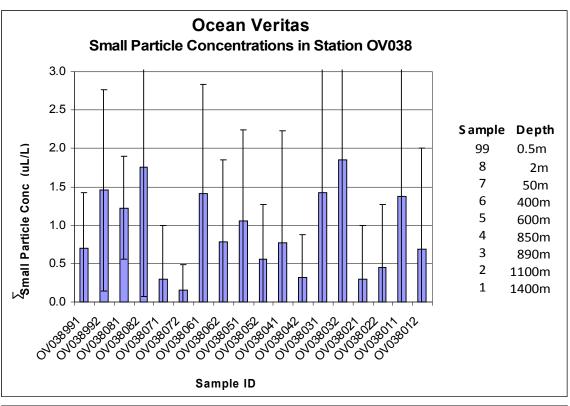
Water samples were collected at five stations for particle size distribution measurements using the LISST-100X particle counter. A total of 90 LISST samples were analyzed, including duplicates. Samples were also collected and stored for shore based fluorescence intensity ratio measurements.

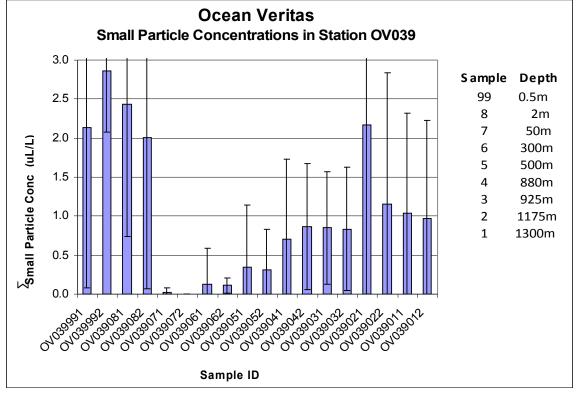
Figure 1 presents the small droplet ($\sum 2.5$ - 60µm) particle size data for stations OV036 through OV040. LISST analysis and in-situ fluorometry detected a slight plume in stations OV036, OV039, and OV040. The LISST compliments the CTD fluorescence signal revealing a slight elevation of small particles at the bottom depths. These three stations also had elevated levels of small particles at the surface (0.5m) and 2m.

Station #	Lat	Long
OV036	28.73201	-88.37679
OV037	28.705997	-88.413788
OV038	28.717000	-88.398000
OV039	28.745	-88.398
OV040	28.745	-88.422









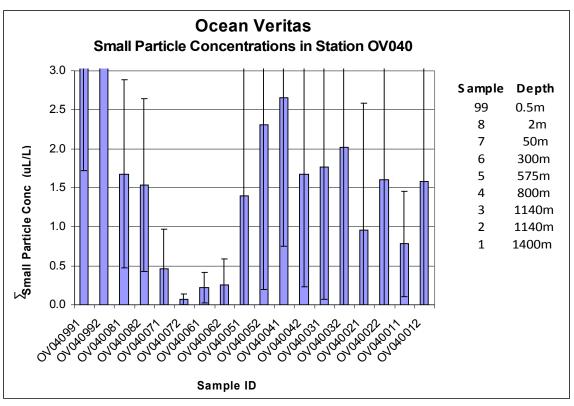


Figure 1: Average small particle concentrations (n=20) as a function of depth from stations OV036 to OV040.